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REPORT OF THE AGRICULTURAL HEALTH & SAFETY IMPLEMENTATION COMMITTEE



JANUARY 1989





REPORT OF THE

AGRICULTURAL HEALTH AND SAFETY

IMPLEMENTATION COMMITTEE

TO THE

MINISTER OF AGRICULTURE AND FOOD

AND THE

MINISTER OF LABOUR

MAR S 0 1989

CONSUMER INFORMATION CONTRE
ONTARIO MINISTRY OF
AGRICULTURE AND FOOD



The Honourable Jack Riddell Minister of Agriculture and Food 801 Bay Street 11th Floor Toronto, Ontairo M7A 1A3 The Honourable Gregory Sorbara Minister of Labour 400 University Avenue 14th Floor Toronto, Ontario M7A 1T7

Dear Sirs:

We are pleased to submit the Report of the Agricultural Health and Safety Implementation Committee. The committee was established in order to review the recommendations of the Ontario Task Force on Health and Safety in Agriculture, and to make recommendations for implementation. This report contains those recommendations for implementation.

We sincerely hope that the information presented here will contribute to the improvement of agricultural health and safety in Ontario.

Yours truly,

J.C. Rennie
Co-Chairman

Peter Sadlier-Brown
Co-Chairman

Ross McKinnell

Tima Norry

Tom Sawyer

George Underwood

Tom Sawyer

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EXECUTIVE SUMMARY

This is the Report of the Agricultural Health and Safety Implementation Committee to the Minister of Agriculture and Food, and the Minister of Labour. The focus of this report is an implementation plan for putting into effect the recommendations of the Ontario Task Force on Health and Safety in Agriculture.

The Ontario Task Force on Health and Safety in Agriculture was established by an Order-in-Council on October 21, 1983, under the joint sponsorship of the Ministries of Agriculture and Food, and Labour. The assignment of the Task Force was to investigate and report on the need for protection of the health and safety of farmers, farm workers and members of farm families engaged in farm work.

The final report of the Task Force was tabled in the Ontario Legislature on December 2, 1985. The report contained 52 recommendations for the improvement of agricultural health and safety in Ontario. The primary recommendation of the Task Force was that an agency be jointly established by the Ministries of Agriculture and Food, and Labour to develop and administer health and safety programs in agriculture, and to implement the recommendations of the Task Force Report.

After discussions among senior officials of both Ministries, it was decided to follow up on the recommendations of the Task Force by establishing a separate implementation committee. On September 2, 1987, the Agricultural Health and Safety Implementation Committee was established by an Order-in-Council. The purpose of the Implementation Committee was to review the recommendations of the Task Force, and to develop an implementation plan, for presentation to the Ministers of Agriculture and Food, and Labour.

The implementation Committee was co-chaired by Assistant Deputy Ministers of the Ministries of Agriculture and Food, and Labour. The Committee consisted of seven members, three representing farmers, two representing farm workers, one representing the farm machinery industry, and one representing the agricultural chemical industry.

The Implementation Committee met regularly between September 1987 and June 1988. Each recommendation in the Task Force Report was reviewed in depth. Committee decisions on the relative merits, and on the implementation of the Task Force Recommendations were made on a consensus basis.

Implementation Plan

Four premises underlie the Committee's implementation plan:

- that a government agency to implement the recommendations of the Ontario Task Force on Health and Safety in Agriculture is not necessary;
- 2. that wherever possible, education rather than legislation is the preferred means of addressing a particular health and safety issue;
- that where several Task Force recommendations are related in their objectives, they can be grouped into fewer but more comprehensive recommendations; and
- that wherever possible, a recommended course of action should be costeffective.

To implement the recommendations of the Ontario Task Force on Health and Safety in Agriculture, the Committee sets forth 36 Recommendations. Recommendations 1 to 33 arise out of the original 52 recommendations in the Task Force Report and address the following areas: data collection and analysis, farm machinery, farm chemicals, farm buildings/structures, farm vehicles on public roads and human factors.

Recommendations 34 to 36 are proposed by the Committee in order to facilitate implementation of all other recommendations.

Since the Implementation Committee did not accept the Task Force's recommendation to establish a new agency responsible for agricultural health and safety in Ontario, the Committee divided the responsibility for implementing its recommendations among the following 7 existing organizations or delivery agencies:

Ministry of Agriculture and Food,
Farm Safety Association,
Ontario Farm Implements Board,
Ministry of Labour,
Ministry of Health,
Ministry of the Environment, and
Ministry of Transportation.

The Implementation Committee's plan significantly increases the responsibilities and the operating costs of the Farm Safety Association and the Ministry of Agriculture and Food.

Cost of Implementation

The Committee attempted to determine the implementation costs to the Ministry of Agriculture and Food, the Farm Safety Association, the Ontario Farm Implements Board, and to the farmer. In so doing, the Committee had to make certain assumptions and it must therefore be emphasized that the figures presented are <u>estimates</u> and represent approximate one-time and ongoing costs.

The Committee suggested that the Ministry of Agriculture and Food implement 10 recommendations. These recommendations propose,

- government funding for a tractor retrofitting program and for the fencing of manure lagoons and tanks;
- training programs on farm machinery, pesticides and anhydrous ammonia; and
- 3. research projects.

The Committee estimated a total one-time expenditure by the Ministry of Agriculture and Food of \$5,450,000 to cover the costs of the tractor retrofitting and fencing programs and the research projects.

The Committee also estimated total on-going costs of \$300,000 per year for the provision of the training programs.

The Committee suggested that the Farm Safety Association implement 8 recommendations. These recommendations propose,

- a comprehensive system for the collection and analysis of data on injuries, illness and fatalities among farmers and farm workers; and
- expanded information and education programs on various agricultural health and safety issues.

The Committee estimated that in order to implement the recommendations directed to it, the Farm Safety Association would require \$450,000 per year for the hiring of additional staff and the acquisition of computer equipment. The Committee proposed that this additional funding be provided by the government, through the Ministry of Agriculture and Food.

The Committe suggested that the Ontario Farm Implements Board implement 6 recommendations. These recommendations propose,

- regulations, research projects and educational programs respecting farm machinery; and
- 2. the standardization of the controls on farm implements.

The Committee estimated the total on-going costs to the Ontario Farm Implements Board to be \$100,000 per year for the hiring of additional staff; and a total one-time cost of \$500,000 for the research projects.

Several of the Implementation Committee's recommendations may entail costs to the farmer. The recommendations in question propose that the farmer:

- 1. pay a fee for training courses (\$15.00 per course);
- contribute to the costs of retrofitting a tractor with roll-over protective structures (\$500.00);
- contribute to the costs of retrofitting machinery with beepers (\$100.00);
 and
- 4. contribute to the costs of fencing a manure lagoon or tank (\$500.00).

The costs listed in points 1 to 3 above are all costs the farmer would assume voluntarily. The only cost a farmer would be required to pay would be the cost to fence a manure lagoon or tank, if the farmer resided in a municipality with a fencing by-law.

Dollar figures were not prepared for the implementation costs to the Ministries of Labour, Health, Environment and Transportation. The costs to these agencies are expected to be minimal because the resources (materials and expertise) required for implementation already exist within these agencies.

Appendices

Appendix I presents the original 52 recommendations of the Ontario Task

Force on Health and Safety in Agriculture along with an explanation of the

Implementation Committee's action on each recommendation.

Appendix II describes the role and responsibilities of the Farm Safety Association.

INTRODUCTION

This is the Report of the Agricultural Health and Safety Implementation Committee to the Minister of Agriculture and Food, and the Minister of Labour.

The focus of the report is a plan for implementing the recommendations of the Ontario Task Force on Health and Safety in Agriculture. Information on the history of the Ontario Task Force, and on events leading to the establishment of the Agricultural Health and Safety Implementation Committee, is presented in the <u>Background</u> section.

Cost estimates for implementation are also provided.

Appendix 1 of the Report presents the recommendations of the Task Force on Health and Safety in Agriculture along with an explanation of the Implementation Committee's action on each recommendation. Appendix II describes the role and responsibilities of the Farm Safety Association Inc.

BACKGROUND

Ontario Task Force on Health and Safety in Agriculture

The Ontario Task Force on Health and Safety in Agriculture was established by an Order-in-Council on October 21, 1983, under the joint sponsorship of the Ministries of Agriculture and Food, and Labour. The Task Force consisted of a chairman and six members, four representing farmers, and two representing paid farm workers. The assignment of the Task Force was to investigate and report on the need for protection of the health and safety of farmers, farm workers and members of farm families engaged in farm work. To carry out its assignment, the Task Force collected and analyzed relevant literature, consulted experts in selected areas of health and safety concern, and held public hearings in eleven centres across Ontario.

The final report of the Task Force was tabled in the Ontario Legislature on December 2, 1985. The report contained 52 recommendations for the improvement of agricultural health and safety in Ontario.

The recommendations advocated (1) legislation in specific areas; (2) better educational programs for farmers and farm workers; and (3) the development of information bases on the health and safety experience of people doing farm work.

The primary recommendation of the Task Force was that an agency be jointly established by the Ministries of Agriculture and Food, and Labour to develop and administer health and safety programs in agriculture, and to implement the recommendations of the Task Force Report.

As a preliminary step in addressing the recommendations of the Task Force Report, comments were solicited from parties submitting briefs to the Task Force, as well as from those organizations on whose activities the recommendations were likely to have an impact. The comment period ended March 31, 1986, after which senior officials in the Ministries of Agriculture and Food, and Labour reviewed the 28 responses received.

After discussions among senior officials of both Ministries, it was decided to follow up on the recommendations of the Task Force by establishing a separate implementation committee.

Agricultural Health and Safety Implementation Committee

On September 2, 1987, the Agricultural Health and Safety Implementation Committee was established by an Order-in-Council.

The Implementation Committee was co-chaired by Assistant Deputy Ministers of the Ministries of Agriculture and Food, and Labour. The Committee consisted of seven members, three representing farmers, two representing farm workers, one representing the farm machinery industry, and one representing the agricultural chemical industry. The purpose of the Implementation Committee was to review the recommendations of the Task Force, and to develop an implementation plan for presentation to the Ministers of Agriculture and Food, and Labour.

The Implementation Committee met regularly between September 1987 and June 1988. Each recommendation in the Task Force Report was reviewed in depth. To assist the Implementation Committee in its review, staff from both Ministries provided background information, and where necessary, experts from other agencies or organizations were invited to speak to the Committee. Committee decisions on the relative merits, and on the implementation of the Task Force Recommendations were made on a consensus basis.

Four premises underlie the Committee's implementation plan. The first premise is that a new government agency to implement the recommendations of the Task Force is not necessary. As mentioned earlier, the primary recommendation of the Task Force was that an agency be jointly established by the Ministries of Agriculture and Food, and Labour, to develop and administer health and safety programs in agriculture, and to implement the recommendations of the Task Force Report. This recommendation was based on the Task Force's assessment of existing programs respecting health and safety in agriculture.

The Task Force criticized existing programs as being spread among a number of organizations, and therefore lacking co-ordination. Among the organizations currently offering health and safety programs or information to farmers are the Farm Safety Association, the Ministry of Agriculture and Food, the Crop Protection Institute of Canada, industries supplying the farm customer with equipment or other products such as pesticides, and marketing boards that represent farm production. The Farm Safety Association is the only one of these organizations whose primary objective is the improvement of health and safety on farms. More information on the role and responsibilities of the Farm Safety Association is in Appendix II.

The Task Force also criticized the fact that the funding available to maintain the existing programs is insufficient to allow the majority of farms to be reached.

The Implementation Committee believes that these criticisms of existing programs are valid, but does not believe that the creation of a new government body is the appropriate solution. The Committee believes instead that the organizations already delivering health and safety programs to the farming community should receive the financial support needed to expand and improve their programs, to meet the needs identified in the Task Force Report.

A second premise upon which the implementation plan is based is that, wherever possible, education rather than legislation is the preferred means of addressing a particular health and safety issue. The Committee sees no merit in recommending legislation that is either impractical or impossible to enforce, and has amended some of the original Task Force recommendations to reflect that view. (Appendix I gives a detailed breakdown of the Implementation Committee's review of the Task Force recommendations.)

The third premise underlying the implementation plan is that where several Task Force recommendations are related in their objectives, they can be grouped into fewer but more comprehensive recommendations. Based upon this premise, the Committee reduced the original 52 Task Force recommendations to 33. The Committee also added 3 new recommendations.

Finally, the fourth premise of the implementation plan is that, wherever possible, a recommended course of action should be cost-effective. In evaluating each Task Force recommendation, the Committee carried out a risk analysis and weighed the expected benefit of putting the recommendation into effect, against the resources required to do so.

IMPLEMENTATION PLAN

To implement the recommendations of the Ontario Task Force on Health and Safety in Agriculture, the Committee sets forth 36 recommendations. Recommendations 1 to 33 arise out of the original 52 recommendations in the Task Force Report. They have been grouped according to the same general subject areas (for example, Farm Machinery) as in the Task Force Report. Recommendations 34 to 36 are proposed by the Committee in order to facilitate implementation of all other recommendations.

Recommendations

Data Collection and Analysis

- 1. That the Farm Safety Association solicit knowledgeable assistance to establish criteria for the identification and definition of farm fatalities, farm accidents and farm illness; that every effort be made to establish criteria that will generate data compatible with data on the farm work force generated by Statistics Canada and the Workers' Compensation Board data collection systems; that data be collected from all available sources, such as the Hospital Medical Records Institute, Ontario Hospital Insurance Plan, Poison Control Centres, Workers' Compensation Board, Ontario Ministry of Health, and others; and that this data be collected, analyzed and interpreted by the Farm Safety Association with assistance from the Ontario Ministry of Agriculture and Food and the Ministry of Labour.
- That the case-by-case description format of the Farm Safety
 Association's annual report on farm fatalities be expanded to include
 information on causation, and that greater public use be made of the
 report and background information to it as vehicles for accident
 prevention.

Farm Machinery

- 3. That approved roll-over protective structures (ROPS) and seat belts be required by regulation under the <u>Farm Implements Act</u>, on all new tractors after January 1, 1990; that this regulation permit the use of collapsible ROPS where available; and that only essential exemptions to the regulation be worked out by the Ontario Farm Implements Board established under the <u>Farm Implements Act</u>.
- 4. That a government funded program be developed by the Ministry of Agriculture and Food to assist farmers with the cost of installing ROPS on currently owned tractors for which ROPS are available; that manufacturer-approved ROPS or designs tested and certified by the Canadian Standards Association be used for this purpose; and that voluntary measures or programs be used to encourage and promote retrofitting.
- 5. That research be conducted on the development and application of interlocking safety cut-off switches on farm tractors and other selfpropelled farm equipment, and on emergency power take-off (PTO) shut-off switches by the Ontario Farm Implements Board as empowered by the <u>Farm Implements Act</u>, 1987.
- 6. That automatic beepers appropriate to the machine in question, be required by regulation, to be developed by the Ontario Farm Implements Board under the <u>Farm Implements Act</u> on all new self-propelled farm equipment and that farmers be encouraged to equip machinery already in use with similar devices.
- 7. That the Ontario Farm Implements Board initiate a program with the tractor manufacturers to promote standardization of the colour, graphics, location and operation of the basic controls and the location and design of remote plugs on all farm tractors sold in Ontario.

- 8. That the Ministry of Agriculture and Food make every effort to ensure that by 1990:
 - high quality training in the operation and maintenance of farm machinery be offered through the Colleges of Agricultural Technology, and heavily promoted among farmers, farm workers and farm equipment dealers;
 - those who take the training be eligible for financial assistance normally available to persons taking skill upgrading courses; and
 - an apprenticeship program, in the operation and maintenance of farm machinery be developed for farm workers, with assistance from the Ministry of Skills Development.
- 9. That the Farm Safety Association, in conjunction with the Ontario Ministry of Agriculture and Food and commodity organizations, promote a voluntary safety audit program including, but not limited to, the safe installation, maintenance and operation of mechanical equipment on Ontario farms.
- 10. That shielding and guarding devices, as recommended by the Ontario Farm Implements Board be mandatory on new farm machinery purchased in Ontario, and that farmers be encouraged to equip machinery already in use with such devices.
- 11. That the Farm Safety Association develop high profile awareness measures to maintain farmer and farm worker alertness to the risks associated with the maintenance and use of farm machinery, with specific attention being given to the use of shields and guards.
- 12. That the Ontario Farm Implements Board be responsible for keeping records about experience with farm machinery in Ontario (such as repairs, breakdowns, accidents, etc.), for communicating that information to farm machinery users, and for establishing standards for machinery performance and influencing farm machinery design and construction.

Farm Chemicals

- 13. That the Ontario Ministry of Agriculture and Food, with support from the Ministry of the Environment, the Farm Safety Association and the Crop Protection Institute of Canada develop and mount education programs to ensure farmer and farm worker awareness of:
 - the health and safety hazards associated with pesticides;
 - the proper pesticide handling procedures, including the need for good personal hygiene practices; and
 - the availability, selection, use and care of personal protective equipment.
- 14. That as a short-term strategy, the pesticide container disposal method used in Ontario be triple-rinsing, puncturing, and disposal in an approved municipal land-fill site; and that as a longer-term strategy, the Pesticide Disposal Committee, which is chaired by the Ministry of the Environment, give high priority to supporting industry's development of reusable, standardized and biodegradable containers.
- 15. That farmers and farm workers observe, as a minimum interval between the time of application of a pesticide and the time of next working on the crop, the greater of the re-entry period specified on the product label or the period set out in the Ministry of Agriculture and Food Production Recommendations for the year and the pesticide in question. The re-entry period applies equally to field crops, to sprayed buildings, and to buildings containing sprayed crops.
- 16. That the Ministry of Labour review personal protective equipment standards from organizations and countries other than NIOSH and Britain, with a view to improving the availability, in Ontario, of the protective equipment needed to handle pesticides safely.

- 17. That the Ministry of Labour recommend to the governing bodies of health professionals (doctors, nurses, paramedics) that training in the effects, diagnosis, and treatment of pesticide exposure be included in the medical school curriculum.
- 18. That the Ministry of Labour be responsible for ensuring that health professionals have immediate telephone access, through Poison Control Centres, to treatment information on all pesticides registered in Canada.
- 19. That the Ministry of Agriculture and Food, with support from the Fertilizer Institute of Ontario, and the Farm Safety Association, ensure that training on the properties, safe handling and emergency treatment of anhydrous ammonia exposure is available and promoted among farmers and farm workers.

Farm Structures, Fields and Yards

- 20. That the Farm Safety Association, with support from the Ministry of Agriculture and Food, and the Ontario Silo Builders Association, develop a high profile information program informing farmers and farm workers of the characteristics of silo gas, the dangers inherent in exposure to it, and all necessary protective measures.
- 21. That the Ministry of Agriculture and Food, with support from the Ministry of Labour, and commodity organizations representing farmers who use silos, develop reliable gas detection devices.
- 22. That the Ministry of Agriculture and Food conduct research to investigate the effectiveness of both safety cages for silo ladders and fall-arrest devices. This research is to be completed by January 1, 1990. At that time, consideration should be given to expanding the recommendation to include other farm structures over a certain height.

- 23. That the Ministry of Agriculture and Food develop a "model by-law" requiring manure lagoons and tanks on farms to be enclosed by child-proof fencing at least four feet high, properly secured at the ground level and having self-closing gates and child-proof locks; and that the Ministry of Agriculture and Food seek co-operation from the Ministry of Municipal Affairs to encourage municipalities to adopt the by-law.
- 24. That the Ministry of Agriculture and Food conduct research and develop guidelines on safe work practices respecting entry into manure lagoons and tanks. The guidelines are to be developed by January 1, 1990.
- 25. That to enable owners of existing unfenced manure lagoons and tanks, to comply with a municipal by-law requiring fencing, the government through the Ministry of Agriculture and Food, provide financial assistance comparable to that already in place under the Soil Conservation and Environmental Protection Assistance Program for safeguarding new manure storage facilities.
- 26. That the Farm Safety Association inform farmers and farm workers about dust-related diseases, and their prevention.
- 27. That the Farm Safety Association, with support from the Ontario Ministry of Agriculture and Food, inform farmers and farm workers about the seriousness of, and the prevention of, zoonotic diseases.
- 28. That the Ministry of Health take responsibility for preparing and circulating to Ontario doctors, information on:
 - dust-related diseases in farmers and farm workers;
 - zoonotic diseases in farmers and farm workers; and
 - the hazards of pesticides, anhydrous ammonia and other farm chemicals.

Farm Vehicles on Public Roads

29. That the Ministry of Transportation review the relevance of the provisions of the Highway Traffic Act to farm vehicles every five years.

Human Factors

- 30. That the Farm Safety Association, with support from the Ontario Ministry of Agriculture and Food and the federal Agricultural Employment Services, develop educational material promoting discussion between farmer and farm worker at the time of hiring, respecting conditions of employment, with particular attention being given to work breaks as they relate to safety.
- 31. That the Ministry of Health, in consultation with the Farm Safety Association, develop guidelines for farmers, on the provision of adequate wash-up and toilet facilities for workers.
- 32. That the Farm Safety Association, with support from the Ministry of Labour, develop guidelines for farmers on the importance of involving the farm worker in all health and safety matters. These guidelines should also include an explanation of the services available to the farmer and farm worker, through the Farm Safety Association; and in particular, a reference to the fact that farm workers can request a safety audit to be conducted by the Farm Safety Association.
- 33. That the Farm Safety Association give consideration to including farm worker representation on its Board of Directors.

New Proposals

In addition to the above 33 recommendations, which arise out of the original 52 in the Task Force Report, the Implementation Committee is making 3 new recommendations.

The Committee recognizes that the mandate of, and the funding available to, the Farm Safety Association must be expanded in order that the Association can effectively implement the recommendations that have been directed to it. Therefore the Committee recommends,

- 34. That the mandate and operation of the Farm Safety Association be amended to include the delivery of agricultural health and safety programs to the entire primary agricultural industry, regardless of linkage to the Workers' Compensation Board.
- 35. That the government, through the Ministry of Agriculture and Food, provide funding to the Farm Safety Association to permit implementation of the recommendations directed to it.

Finally, the Committee believes that there should be some mechanism to monitor the progress of the delivery agencies towards implementing the Committee's recommendations, and therefore proposes,

36. That a formal review mechanism be established by the Ministry of Agriculture and Food to monitor the progress of the delivery agencies towards implementing the Committee's recommendations; that this review process take place by means of a meeting, every year for 5 years, commencing in 1989, of representatives of the delivery agencies, with the Minister of Agriculture and Food and the Minister of Labour. The delivery agencies to be represented are the Farm Safety Association, the Ministry of Agriculture and Food, the Ontario Farm Implements Board, the Ministry of Labour, the Ministry of Health, the Ministry of Environment and the Ministry of Transportation. The results of the annual review are to be made available to the public upon request.

Delivery Agencies

The Committee divided the responsibility for implementing its recommendations among the following 7 organizations or delivery agencies:

Ministry of Agriculture and Food,
Farm Safety Association,
Ontario Farm Implements Board,
Ministry of Labour
Ministry of Health,
Ministry of the Environment, and
Ministry of Transportation.

In several of its recommendations, the Implementation Committee proposed that these primary delivery agencies receive support from other organizations. The organizations that the Committee has proposed to assist the primary delivery agencies are:

Ministry of Skills Development,
Ministry of Municipal Affairs,
Ontario Silo Builders Association,
Fertilizer Institute of Ontario,
Crop Protection Institute of Canada,
Agricultural Employment Services (federal), and
commodity organizations.

A brief explanation of why each of the primary delivery agencies was proposed to implement certain recommendations follows.

Ministry of Agriculture and Food

The Committee proposed that the Ministry of Agriculture and Food implement Recommendations 4, 8, 13, 15, 19, 21, 22, 23, 24 and 25, based on the Committee's review of the mandate and ongoing programs of the Ministry.

Recommendations 4 and 25 propose government funding programs. The Ministry of Agriculture and Food currently administers a large number of programs that provide financial assistance, such as grants or subsidies, to farmers. The Ministry is also responsible for the development of new programs, and as such, already has in place the delivery mechanisms to implement Recommendations 4 and 25.

Recommendations 8, 13 and 19 propose that the Ministry take the lead in ensuring that training on farm machinery, pesticides and anhydrous ammonia, respectively, is available to farmers and farm workers. The Ministry is responsible for the educational programs for farmers and farm workers that are offered at the 5 Colleges of Agricultural Technology in Ontario, and at the Agricultural College at the University of Guelph, and is therefore the appropriate agency to put into effect these recommendations for specific training courses.

Recommendations 21, 22 and 24 propose that the Ministry take the lead in conducting research projects relating to silo gas detection, safety cages for silos, and safe work practices in manure lagoons and tanks, respectively. The Agricultural Engineering Services of the Ministry are linked to the research and development programs at the College of Agricultural Technology, and at the University of Guelph's School of Engineering, and as such, are able to put Recommendations 21, 22 and 24 into effect. It is proposed that assistance to the Ministry of Agriculture and Food, respecting the implementation of Recommendation 21, be provided by commodity organizations representing farmers with silos.

Farm Safety Association

The Committee proposed that the Farm Safety Association implement Recommendations 1, 2, 9, 11, 20, 26, 27 and 30. In general, these recommendations deal with data collection and education, two activities which the Farm Safety Association already carries out.

The Farm Safety Association currently collects and analyses health and safety data, but its programs do not have the scope proposed in Recommendation 1. The Committee believes that with additional resources and staff, the existing data collection mechanisms can be expanded to put Recommendations 1 and 2 into effect.

Recommendation 9 proposes a voluntary audit program respecting the safe installation, maintenance and operation of mechanical equipment. An audit of conditions on individual farms is one of the programs already offered by the Farm Safety Assocation.

Recommendations 11, 20, 26, 27 and 30 propose information and education programs on various agricultural health and safety issues. The Farm Safety Association has the expertise to develop the information programs; however, it lacks the mandate and the means to ensure that the information reaches the entire farm community. With additional field staff and an expanded mandate that would make the Association responsible for the education of all farmers and farm workers, the Committee believes that the Association could put these recommendations into effect.

Ontario Farm Implements Board

The Committee proposed that the Ontario Farm Implements Board implement Recommendations 3, 5, 6, 7, 10 and 12, based on the Committee's review of the proposed <u>Farm Implements Act</u>.

The <u>Farm Implements Act</u> regulates the sale of farm machinery, and establishes the Ontario Farm Implements Board. The Act gives the Board certain powers and duties, among which the Committee noted the following:

Section 5(9)

The Board may conduct research related to farm implement design, construction, performance and safety.

Section 5(10)

The Board may develop and co-ordinate or approve educational programs respecting farm implement safety and may promote participation in such programs.

Section 5(11)

The Board may work with manufacturers to encourage standardization of the design and operation of controls of farm implements manufactured for sale in Ontario.

The Committee believes that because of these powers of the Board relating to research, standardization and education, the Board is the most appropriate agency to put Recommendations 5, 7 and 12 into effect.

The Committee also noted that section 35(m) of the Farm Implements Act empowers the Board to make regulations,

"regulating or prohibiting the installation or use of any farm implement, part or device or any class thereof."

The Committee believes that because of this regulation-making power of the Board, the Board is the most appropriate agency to put Recommendations 3, 6 and 10 into effect.

Ministry of Labour

The Committee proposed that the Ministry of Labour put into effect Recommendations 16, 17 and 18.

The Ministry of Labour has the in-house expertise in industrial hygiene to enable it to review personal protective equipment standards as set out in Recommendation 16. The Ministry also has the expertise and programs in occupational medicine to allow it to accept responsibility for encouraging a change in the school curricula of health professionals (Recommendation 17); and for ensuring telephone access, for health professionals, to treatment information on pesticides (Recommendation 18).

Ministry of Health

The Committee proposed that the Ministry of Health put into effect Recommendations 28 and 31.

Recommendation 28 deals with the need for doctors to have information on diseases and injuries likely to occur among farmers and farm workers. The Committee believes that the Ministry of Health has the expertise to prepare the appropriate information, and the means to distribute it, especially to doctors in rural areas who are most likely to have farmers and farm workers among their patients.

Recommendation 31 proposes that the Ministry of Health develop guidelines for adequate wash-up and toilet facilities for farm workers. The Ministry of Health has experience in developing similar guidelines, namely, the housing guidelines for migrant workers. In addition, the mandate of the Ministry of Health, under the Health Protection and Promotion Act includes sanitary conditions on farms.

Ministry of the Environment

The Committee proposed that the Ministry of the Environment put into effect Recommendation 14, respecting the disposal of pesticide containers, because the Ministry administers the <u>Pesticides Act</u> and regulations, which apply extensively to farmers, and because the Ministry currently chairs the Pesticide Disposal Committee.

Ministry of Transportation

The Committee proposed that the Ministry of Transportation put into effect Recommendation 29, respecting a periodic review of the <u>Highway Traffic</u>

Act, because the Ministry administers this legislation, and already conducts an ongoing review.

COST OF IMPLEMENTATION

The Committee attempted to determine the cost of implementing its recommendations. Dollar figures were prepared of the costs to the Ministry of Agriculture and Food, the Farm Safety Association, the Ontario Farm Implements Board and to the farmer. In determining the implementation costs, the Committee had to make certain assumptions and it must therefore be emphasized that the figures presented in this section are estimates, and represent approximate one-time and ongoing costs.

Implementation Costs to the Ministry of Agriculture and Food

The Committee proposed that the Ministry of Agriculture and Food implement 10 recommendations (Committee Recommendations 4, 8, 13, 15, 19, 21, 22, 23, 24 and 25).

Recommendations 4 and 25 propose government funding for a tractor retrofitting program, and for the fencing of manure lagoons and tanks, respectively. The cost to the Ministry of Agriculture and Food of providing the funding is based on the assumption that the Ministry would contribute half of the retrofitting and fencing costs. The other half would be contributed by the farmer.

With respect to Recommendation 4, the cost to retrofit a tractor with roll-over protective structures and seat belts can range from \$500.00 to \$3,000.00. For the purposes of cost estimation, a figure of \$1,000.00 was chosen. Therefore, if the Ministry provides half of that amount, namely \$500.00 per tractor, and we assume that there are 10,000 tractors to be retrofitted, the cost to the Ministry for tractor retrofitting is \$5,000,000.

With respect to Recommendation 25, the Committee recognized that there are several variables that determine the cost of fencing a manure lagoon or tank. The Committee selected \$1,000.00 as a reasonable cost estimate. Therefore, if \$500.00 is contributed per lagoon or tank, and it is estimated

that there are 500 unfenced manure lagoons or tanks in Ontario, the cost of the fencing program would be \$250,000.

The Committee did not attempt to establish the duration of either the retrofitting or the fencing programs. This will be left to the discretion of the Ministry of Agriculture and Food. In any case, the total cost of the retrofitting and fencing programs represents a one-time expenditure of \$5,250,000.

Recommendations 21 and 22 each propose research projects relating to silo gas. Based upon past experience and practice, the cost of carrying out both research projects is estimated to be \$200,000.

Recommendations 8, 13 and 19 propose training programs on farm machinery, pesticides and anhydrous ammonia, respectively. The Committee estimated the cost to deliver a training program to be \$35 per person. This figure is based on the delivery costs of existing training programs such as the Grower Pesticide Safety Course. If all 3 training programs are offered in the same year, and we assume that 5,000 farmers per year participate in each course, the cost per year of delivering the 3 training programs is \$525,000 (\$35 x 5,000 farmers x 3 courses).

It should be pointed out, however, that the cost of delivering the training programs will be offset by any money collected from the participants as a registration fee. The registration fee for the Grower Pesticide Safety Course is \$15.00. If \$15.00 is the registration fee charged for each of the above training courses, the Ministry of Agriculture and Food can recover \$225,000 (\$15 x 5,000 farmers x 3 courses) of the delivery costs. In other words, the total annual cost to the Ministry of delivering the 3 training courses is \$300,000.

A detailed breakdown of the implementation costs to the Ministry of Agriculture and Food is shown in Table 1.

Implementation Costs to the Farm Safety Association

The Committee proposed that the Farm Safety Association implement 8 recommendations (Recommendations 1, 2, 9, 11, 20, 26, 27 and 30).

With respect to Recommendation 1, it is recognized that the Farm Safety Association does not have the expertise, or the computer equipment to carry out the data collection and analysis as proposed. Therefore, a portion of the cost estimate includes the money needed to hire a statistician and one support staff, and to acquire computer equipment.

The remaining 7 recommendations build on the existing educational initiatives of the Farm Safety Association. It is believed that the expertise needed to prepare the proposed information programs already exists within the Association, however, additional field staff are needed to ensure that the information reaches the entire farm community. Therefore, a portion of the cost estimate includes the money needed to hire 3 additional field staff and one support staff.

The Committee estimated the ongoing costs to the Farm Safety Association for additional staff to be \$250,000 per year, and for new computer equipment to be \$100,000 per year.

In addition, \$100,000 per year has been allotted to miscellaneous expenses, which are expected to include such items as printing of the new or expanded information programs, cars for field staff, etc.

The total ongoing costs for implementation will be approximately \$450,000 per year. It should be noted that, at present, the Farm Safety Association has an annual budget of approximately \$1,000,000, which is derived from assessments paid to the Workers' Compensation Board by farm employers. The Committee proposed that the additional \$450,000 be provided by the government, through the Ministry of Agriculture and Food.

A detailed breakdown of the costs to the Farm Safety Association is shown in Table 2.

Implementation Costs to the Ontario Farm Implements Board

The Committee proposed that the Ontario Farm Implements Board implement 6 recommendations (Recommendations 3, 5, 6, 7, 10 and 12).

Recommendations 3, 6 and 10 proposed legislation respecting farm machinery. No costs were calculated for the legislative process.

The implementation of Recommendation 5 requires a one-time expenditure for the proposed research project(s). The Committee estimated that a total of \$500,000 would be required to complete the project(s).

Recommendations 7 and 12 were thought to entail ongoing costs of \$100,000 per year, primarily for the staff needed to carry out the proposed action.

A detailed breakdown of the costs to the Ontario Farm Implements Board is Shown in Table 3.

Implementation Costs to the Ministries of Labour, Health, Environment and Transportation

Dollar figures were not prepared for the implementation costs to the Ministries of Labour, Health, Environment and Transportation. It is believed that the costs to these agencies will be minimal because the resources, i.e. materials and expertise, required for implementation already exist within these agencies (See Table 4).

Direct Costs to the Farmer

Several of the Implementation Committee's recommendations may entail costs to the farmer. For example, part of Recommendation 4 proposes that

farmers be encouraged to retrofit tractors that they currently own with rollover protective structures, where possible. If a farmer chooses to retrofit a
tractor, the Committee estimates the cost to the farmer to be \$500.00. This
figure is based on an estimate of \$1,000.00 as being the total cost of
retrofitting a tractor, minus \$500.00 to be provided by a grant from the
Ministry of Agriculture and Food.

Recommendation 6 in part proposes that farmers be encouraged to retrofit all self-propelled equipment that they currently own with automatic beepers. If a farmer chooses to equip machinery already in use with automatic beepers, the Committee estimated the cost to the farmer to be \$100.00.

Two related recommendations that may entail costs to the farmer concern the fencing of manure lagoons and tanks. Recommendation 23 proposes the development of a model by-law requiring that manure lagoons and tanks be fenced; and Recommendation 25 proposes financial assistance to farmers with unfenced manure lagoons and tanks to enable them to comply with a by-law requiring fencing.

The Committee estimated the cost to the farmer of compliance with a fencing by-law to be \$500.00. This figure is based on an estimate of \$1,000.00 as the total fencing cost, minus \$500.00 to be provided by a grant from the Ministry of Agriculture and Food.

Finally, several of the Committee's recommendations propose that training courses be developed and offered to farmers and farm workers. The Committee estimated the cost to the farmer to undergo training to be \$15.00 per course. This estimate is based on the \$15.00 registration fee charged for the Grower Pesticide Safety Course.

It should be emphasized that the costs to the farmer to retrofit tractors with ROPS (\$500.00); to retrofit self-propelled machinery with beepers (\$100.00) and to take training courses (\$15.00/course) are all costs the farmer would

assume voluntarily. The only cost a farmer would be required to pay would be the cost to fence a manure lagoon or tank (\$500.00) if the farmer resided in a municipality with a fencing by-law.

A breakdown of the costs to the farmer is shown in Table 5.

Table 6 summarizes the implementation costs to all delivery agencies.

TABLE 1. Implementation Costs: Ministry of Agriculture and Food

	per year per	\$300,000	e based ation ssticide		\$5,000,000	\$250,000	\$200,000		\$300,000/year \$5,450,000	
Cost Estimates	Education: Based on 5000 farmers per year per training program	\$35 - \$15/farmer/course \$20 x 5000 x 3 =	Note: The \$35 and \$15 amounts are based on the delivery cost and the registration fee, respectively, of the Grower Pesticide Safety Course.	Retrofit: Based on 50% grant	ROPS and seat belts \$500/structure x 10,000	Fencing around tanks and lagoons \$500/structure x 500	Research 2 projects @ 100,000		TOTAL ON-GOING COST TOTAL ONE-TIME COST	
Task	Government funded retrofit program for ROPS and seat belts	Training in machinery maintenance, safety and operation	Pesticide safety training	Re-entry period established	Training in anhydrous ammonia safety	Research into silo gas detection	Research into safety cages for silos	Development of model by-law for fencing of tanks and lagoons	Research and guidelines on safe work practices in manure lagoons	Government funded fencing program
Recommendation	4	∞	133	15 *	19	21	22	23	24	25

Committee Recommendation	Task	Cost Estimates	
1	(definition Data (collection (analysis	To implement these recommendations, the FSA would require the following:	the FSA
*	Expansion of fatality report	Human Resources (salaries and benefits)	\$) \$950,000
*	Encourage voluntary audit program	3 Field Staff)	000,000
11 *	Information programs on farm machinery hazards	Physical Resources	4100 000
* 02	Information programs on silo gas	Missell sease, etc.	200
* 52	Information programs on dust - related diseases	Miscenancous Figure 1 resources, cars, Former 6 and support for	
27 *	Information programs on zoonoses	in plementation of other	41 00 000
30 *	Information programs on good employer/employee relations		
		TOTAL ON-GOING COST	\$450,000/year +

* mechanisms already in place, therefore, little additional cost to deliver + funding to be provided by the government, through Ministry of Agriculture and Food

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Committee Recommendation	Task	Cost Estimates	
m	Legislation for ROPS and seat belts on tractors	No cost was calculated for the legislative process.	
ഗ	Research into inter-locking safety cut-off switches and emergency PTO shut-off switches	Research (one shot)	\$500,000
9	Legislation for automatic beepers on selfpropelled farm equipment	Technical & Education	\$100,000
2	Program for standardization of controls		
10	Legislation for shields and guards on farm equipment	TOTAL ON-GOING COST	\$100,000/year
12	Information source for farm machinery	TOTAL ONE-TIME COST	\$500,000

Delivery Agency	Committee Recommendation	Task	Cost Estimates
Ministry of Labour	16	Review of personal protective equipment standards	Minimal - expertise available in-house
	2.1	Amendment of curriculum of health professionals	Minimal cost to Ministry, but eventual
	18	Access to Poison Control Centres	costs to medical/indisting schools
Ministry of Health	28	Information program for physicians	Minimaí - expertise available in-house
	31	Guidelines for toilet and wash-up facilities	Minimal - guidelines for seasonal housing already exist
Ministry of Environment	14	Measures for pesticide container disposal	Minimal - Pesticide Disposal Committee already established
Ministry of Transportation	29	Review of Highway Traffic Act	Minimal - review mechanism already in place

TABLE 5. Direct Costs to the Farmer

Cost Estimates	\$200°00*	\$100.00	\$15.00 per training course			\$500.00*	
Task	Tractor retrofitting with ROPS	Installation of automatic beepers on machinery in use	Training in machinery maintenance and operation	Training in pesticide safety	Training in anhydrous ammonia safety	Fencing of manure lagoon or tank	
Committee Recommendation	7	9	∞	13	19	23	

 $\boldsymbol{\ast}$ Based on assumption that government will provide the other \$500.00

Delivery Agency	On-Going Cost	One-Time Cost
Ministry of Agriculture and Food	\$300,000/year (training)	\$5,450,000 (Government funded programs; research projects)
Farm Safety Association	\$450,000/year (staff; computers)	Not applicable
Ontario Farm Implements Board	\$100,000/year (staff)	\$500,000 (research projects)
Ministry of Labour) Ministry of Health) Ministry of Environment) Ministry of Transportation)	Not determined	Not determined
Farmer	\$15/training course	\$500 (ROPS - voluntary) \$100 (beepers - voluntary) \$500 (fencing - mandatory if by-law in effect)

APPENDIX I

Review of the Recommendations of the Ontario Task Force on Health and Safety in Agriculture

Appendix I is a chart that summarizes the review process carried out by the Implementation Committee. The chart has 3 columns. The left-hand column contains the 52 recommendations of the Ontario Task Force on Health and Safety in Agriculture.

The middle column indicates either "Accepted" or "Not Accepted" beside each Task Force Recommendation. These terms are to be interpreted broadly. For example, the "Accepted" category includes Task Force Recommendations where the Implementation Committee supported the intent of the original recommendation, but suggested an implementation mechanism that differed from that proposed by the Task Force. This applies to many recommendations where the Task Force assigned the responsibility for implementation to the Agency, but the Committee assigned the responsibility for implementation to another organization.

The "Accepted" category also includes Task Force Recommendations that were edited and combined into one, as well as recommendations that were expanded by the Committee.

The "Not Accepted" category includes Task Force Recommendations where the Implementation Committee could either not support the intent of the recommendation, or did not believe that the recommendation could be implemented as proposed by the Task Force.

The right-hand column of the chart gives a brief explanation of the Implementation Committee's decision respecting each Task Force Recommendation. Where applicable, the column cross-references the appropriate recommendation of the Implementation Committee and indicates its page number in the report.

Of the 52 Task Force Recommendations, 35 were accepted with minimal modification, and 17 were not accepted. Of those recommendations that were not accepted, the Committee replaced 11 with recommendations that proposed a different resolution to the problem being addressed.

	Task Force Recommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
1. Pod	That an Agency be established jointly by the Ministries of Agriculture and Food and of Labour that has comprehensive responsibility for developing and administering health and safety programs in Agriculture. (p.33)	Not Accepted	The Committee recognizes the need for improvement in agricultural health and safety, but does not accept the need to create a new Agency to be responsible for agricultural health and safety. The Committee prefers to assign that responsibility to existing agencies, primarily the Farm Safety Association, that already have a mandate or programs relating to health and safety in farm work in order to build on the expertise and initiatives within those agencies. The Committee recognizes the need to expand the mandate of the control of the contro
2. T T O O O O O O O O O O O O O O O O O	That the approach to fatality data collection already in place be extended to make consistent use of all available sources, for example, the files of the Registrar General and of the Office of the Chief Coroner. (p.42)	Accepted	The Committee accepts the intent of this recommendation, as well as Recommendations 3, 4, 7, 8 and 9, all of which are aimed at improving the collection of data relating to agricultural health and safety. The Committee prefers, however, to combine the objectives of Task Force Recommendations 2, 3, 4, 7, 8 and 9 into a single, all-encompassing recommendation, and to assign responsibility for the implementation of that recommendation to the Farm Safety Association, with support from the Ministries of Labour and of Agriculture and Food. See Committee Recommendation 1 on page 5.

3. That rigorous criteria be established for what fatalities are reported as farm fatalities and that they be classified, perhaps as set out in Appendix 2, with respect to the directness of their relationship to farm work. (p.42) 4. That every effort be made to maintain a consistent relationship between the fatality data and farm employment and population statistics produced by Statistics Canada. (p.42) 5. That the case-by-case description format of the Farm Safety Association's annual report on farm fatalities vehicles for accident prevention. (p.42) 5. That the case-by-case description format of the recommendation and has so recommended to include information on causa and has so recommended. See Explanation under Task Force Recommendation 2 and page 33. See Explanation under Task Force Recommendation 2 and page 33. The Committee accepts the intent of the recommendation or causa and has so recommendation or causa and has so recommendation 2 on page 5.	Tas	Task Force Recommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
That every effort be made to maintain a consistent relationship between the fatality data and farm employment and population statistics produced by Statistics Canada. (p. 42) That the case-by-case description format of the Farm Safety Association's annual report on farm fatalities be retained and that greater public use be made of the report and background information to it as vehicles for accident prevention. (p. 42)	es .	That rigorous criteria be established for what fatalities are reported as farm fatalities and that they be classified, perhaps as set out in Appendix 2, with respect to the directness of their relationship to farm work. (p.42)		See Explanation under Task Force Recommendation 2 on page 33.
That the case-by-case description format of the Farm Safety Association's annual report on farm fatalities be retained and that greater public use be made of the report and background information to it as vehicles for accident prevention, (p.42)	4	That every effort be made to maintain a consistent relationship between the fatality data and farm employment and population statistics produced by Statistics Canada. (p.42)	Accepted	See Explanation under Task Force Recommendation 2 on page 33.
	1.5	That the case-by-case description format of the Farm Safety Association's annual report on farm fatalities be retained and that greater public use be made of the report and background information to it as vehicles for accident prevention. (p.42)		The Committee accepts the intent of the recommendation but believes that the annual report on farm fatalities would be more useful as a vehicle for accident prevention if the format were expanded to include information on causation and has so recommended. See Committee Recommendation 2 on page 5.

Explanation of Implementation e Committee Action	The Committee did not accept the recommendation, at this time, on the grounds that it focusses on collecting historical information and is not forward looking. The recommendation should be reviewed at some time in the future, after progress has been made in implementing Committee Recommendation 1.	See Explanation under Task Force Recommendation 2 on page 33.
Action By Implementation Committee	Not accepted	Accepted
Task Force Recommendation	6. That survey work be undertaken among farmers, farm family workers and hired farm workers to: - describe their work injury and illness experience; - describe the occurrence and nature of health and safety hazards in farm work and the extent of exposure to them; - relate the injury and illness experience and exposure information to variables that describe the characteristics of farm work, farm workers and their working conditions; and, - wherever possible, ensure that the survey information is collected and analysed in ways that permit it to be used in conjunction with existing data sources. (p.47)	7. That the agencies currently generating information on farm health and safety experience and those preparing statistics from that information work together to ensure that they use consistent definitions and systems of classification and that their output is compatible with other major statistical series, such as farm employment data prepared by Statistics Canada (p.47)

Review of the Recommendations of the Ontario Task Force on Health and Safety in Agriculture

	lask force kecommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
œ.	That a health data collection system using existing data generating sources, such as the Hospital Insurance Plan, Poison Control Centres, Workers' Compensation Board, Ontario Ministry of Health and perhaps others, be established to record and analyse adverse health effects experienced by farmers and farm workers. (p.48)	Accepted	See Explanation under Task Force Recommendation 2 on page 33.
6	That the Agency, in cooperation with the Ministries of Labour and of Agriculture and Food, put a high priority on developing an information base that will permit meaningful analysis of farm occupational health and safety issues. (p. 54)	Accepted	See Explanation under Task Force Recommendation 2 on page 33.
10.	That approved roll-over protective structures (ROPS) and seat belts be made mandatory on all new tractors used in farming from the earliest date such legislation can be put in place and that only essential exceptions to these requirements be worked out by the Agency responsible for health and safety in Agriculture with representatives of the industry. (p.62)	Accepted	The Committee accepts the need for legislation to require roll-over protective structures (ROPS) and seat belts on new tractors and recommends that the requirement be included in a regulation under the Farm Implements Act. In addition, the Committee expanded the recommendation to allow for the use of collapsible ROPS where available. See Committee Recommendation 3 on page 6.

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Tas	Task Force Recommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
11.	That a government funded program be developed to assist farmers with the cost of installing ROPS on tractors they now own and that are not so equipped; that manufacturer approved ROPS or designs tested and certified by the Canadian Standards Association be used for this purpose; and that the retrofitting program be completed by a date to be specified in legislation. (p. 62)	S Accepted	The Committee accepts the need for government assistance to fund a retrofitting program, and accepts that manufacturer or CSA approved ROPS should be used in a retrofitting program. The Committee does not accept the need to legislate a retrofitting program and recommends that voluntary measures be used to encourage retrofitting. Implementation of the recommendation is assigned to OMAF. See Committee Recommendation 4 on page 6.
12.	12. That interlocking safety cut-off switches be mandatory on farm tractors and other self-propelled farm equipment offered for sale in Ontario after a date to be specified in legislation. (p.64)	Not Accepted	The Committee does not accept the usefulness of interlocking safety cut-off switches on farm equipment as a means of accident prevention, and is in fact aware, that accidents have occurred because of the presence of such devices on farm equipment. The Committee recommends, therefore, that the Ontario Farm Machinery Board conduct research on the application of such devices on farm equipment. See Committee Recommendation 5 on page 6.

H	Task Force Recommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
13.	That an emergency power take-off (PTO) shut-off switch be so located on new farm tractors as to lend itself to being easily reached in emergency situations, and that farmers be encouraged to install such shut-off switches wherever it is practical to do so on existing equipment. (0,64)	Not accepted.	The Committee could not reach a consensus on this recommendation. Some members believe an emergency power take-off (PTO) shut-off switch has merit while others believe such a device may promote carelessness and therefore increase accidents.
			The Committee recommends instead that the Ontario Farm Machinery Board conduct research on the application of PTO shut-off switches. See Committee Recommendation 5 on page 6.
14.		Accepted	The Committee accepts the recommendation and suggests implementation by regulation under the Farm Implements Act. See Committee Recommendation 6 on page 6.
	in use with similar devices. (p.65)		
15.	That the Agency, or the organization selected under Recommendation 22, place a high priority on initiating a program with the tractor manufacturers to promote standardization of the colour, graphics, location and operation of the basic controls and the location and design of remote light plugs on all farm tractors sold in Ontario. (p.66)	Accepted	The Committee accepts the recommendation in principle, and recommends implementation by the Ontario Farm Machinery Board. See Committee Recommendation 7 on page 6.

Tas	Task Force Recommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
16.	That the Agency make every effort to ensure that the training of farmers and farm workers in machinery operation and maintenance is widely available, of high quality and heavily promoted among farmers. (p.71)	Accepted	The Committee accepts the need for training in the operation and maintenance of farm machinery, and also accepts that such training should be available through the Colleges of Agricultural Technology, as specified in Task Force Recommendation 20.
			The Committee has combined the intent of Task Force Recommendation, and assigned responsibility for implementation to OMAF.
			In addition, the Committee has expanded the original intent by recommending the development of an apprenticeship program for farm workers. See Committee Recommendation 8 on page 7.
17.	17. That the Agency in conjunction with commodity associations promote a voluntary audit program covering the safe installation, maintenance and operation of mechanical equipment in Ontario farms and design a system of awards to encourage	Accepted	The Committee supports the concept of a voluntary audit program and recommends implementation by the Farm Safety Association. The committee does not support the use of an awards system. See Committee Recommendation 9 on page 7.
	cooperation in the problem: No. 17		

Review of the Recommendations of the Ontario Task Force on Health and Safety in Agriculture

Ta	Task Force Recommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
18.	. That it be mandatory for shields and guards supplied with farm machinery to be in place when the machinery is operating and that compliance with this requirement be monitored. (p.72)	Not accepted.	The Committee supports the intent of the recommendation but believes it would be impossible to enforce and monitor compliance with the use of shields and guards on farm machinery.
			Therefore, the Committee does not accept the recommendation and recommends instead that educational material on the use of shields and guards be developed. This educational material is to be part of the awareness measures, on farm machinery, to be developed by the Farm Safety Association. See Explanation under Task Force Recommendation 21 on page 41.
19.	That shielding and guarding devices (as recommended by an authority to be appointed by the Ontario government, Recommendation 22) be mandatory on new farm machinery purchased in Ontario after a date to be specified in legislation. (p.72)	Accepted	The Committee accepts the recommendation, and recommends implementation by the Ontario Farm Machinery Board. In addition, the Committee expanded the recommendation by suggesting that the inclusion of used machinery be considered at a later date. See Committee Recommendation 10 on page 7.
20.	That training in farm machinery maintenance be offered through the Colleges of Agricultural Technology and night classes in Secondary Schools; that it be heavily promoted among farmers, farm workers and farm equipment dealers; and that those who take the training be eligible for financial assistance normally available to persons taking skill upgrading courses. (p.75)	Accepted	See Explanation under Task Force Recommendation 16 on page 39.

Task Force Recommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
21. That high profile awareness measures be developed and continually used to maintain farmer and farm worker alertness to the safety risks associated with the maintenance and use of farm machinery.	Accepted	The Committee accepts the recommendation, and assigns implementation to the Farm Safety Association, with support from the Ontario Farm Machinery Board. The Committee expanded the recommendation to include specific reference to the use of shields and guards. See Committee Recommendation 11 on page 7.
22. That an existing Agency (the Ontario Centre of Farm Machinery and Food Processing Technology, or the Ontario Farm Machinery Board) be given responsibility for keeping itself informed about experience with farm machinery in Ontario, establishing standards for machinery performance and influencing farm machinery design and construction. (p.77)	Accepted	The Committee accepts the recommendation but has expanded it to include a responsibility for informing farm machinery users on experience with farm machinery. Implementation is assigned to the Ontario Farm Machinery Board. See Committee Recommendation 12 on page 7.
23. That a high profile information program warning farmers and farm workers about the characteristics of silo gas, the dangers inherent in exposure to it, and informing them of all necessary protective measures be a top priority of the Agency. (p.86)	Accepted	The Committee accepts the intent of the recommendation, and recommends implementation through the Farm Safety Association, with support from the Ministry of Agriculture and Food and the Ontario Silo Builders Association. See Committee Recommendation 20 on page 9.

Review of the Recommendations of the Ontario Task Force on Health and Safety in Agriculture

as	Task Force Recommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
24.	That the Agency and commodity organizations representing farmers who use silos develop for these farmers a system of convenient access to reliable gas detection devices. (p.86)	Accepted	The Committee accepts the intent of the recommendation, and recommends implementation through the Ministry of Agriculture and Food with support from the Ministry of Labour. See Committee Recommendation 21 on page 9.
25.	That the Agency take responsibility for preparing and circulating to Ontario doctors information about the symptoms of dust-related diseases and the conditions in which dust-related diseases are likely to arise among farmers and farm workers. (p.90)	Accepted	The Committee accepts the recommendation but believes it is too narrow, and that Ontario doctors should also have information on other diseases and health problems likely to occur among farmers and farm workers.
			accordingly, and suggests implementation through the Ministry of Health. See Committee Recommendation 28 on page 10.
26.	That the Agency explore problems of dust-related diseases among farmers and the availability and use of the appropriate protective equipment. (p.90)	Accepted	The Committee accepts the intent of the recommendation but believes that it should not focus on information gathering, but rather on informing farmers and farm workers about dustrelated diseases and their prevention.
			Implementation has been assigned to the Farm Safety Association. See Committee Recommendation 26 on page 10.

Tas	Task Force Recommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
27.	That by March 31, 1988 all surface level manure lagoons and tanks on farms be enclosed by child-proof fencing at least four feet high, properly secured at the ground level and having self-closing gates and child-proof locks. (p.94)	Accepted	The Committee accepts the intent of the recommendation, and recommends implementation by means of a provincially approved "model by-law" which municipalities will be encouraged to adopt. The Committee recommends that OMAF develop the model by-law, and encourage adoption in co-operation with the Ministry of Municipal Affairs. See Committee Recommendation 23 on page 10.
28.	28. That at least two metal ladders be installed in all open lagoon and tank type manure storage facilities (p.94)	Not accepted	The Committee does not accept the recommendation on the grounds that ladders may entice entry into the lagoon, or tank, and may become structurally unsound, therefore increasing the likelihood of accidents occurring. The Committee recommends instead that the Ministry of Agriculture and Food conduct research into safe work practices respecting entry into manure lagoons and tanks. See Committee Recommendation 24 on page 10.
29.	That to enable owners of existing unfenced manure lagoons and tanks to comply with Recommendations 27 and 28, the government provide financial assistance comparable to that already in place under the Soil Conservation and Environmental Protection Assistance Program for safeguarding new manure storage facilities. (p.94)	Accepted r	The Committee accepts the intent of the recommendation but amended it to reflect the changes made by the Committee to Task Force Recommendations 27 and 28. See Committee Recommendation 25 on page 10. Implementation is to be through the Ministry of Agriculture and Food.
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Review of the Recommendations of the Ontario Task Force on Health and Safety in Agriculture

35	Task Force Recommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
30.	That the Agency and Ministry of Health: develop means of assessing incidence of zoonotic diseases among farm people compared with the remainder of the population; inform farmers and farm workers of the seriousness of health conditions that result from zoonotic diseases; and, provide farmers and farm workers with information on how best to avoid contracting zoonotic diseases. (p.97)	Accepted.	The Committee accepts, in part, the intent of the recommendation, and recommends that the Farm Safety Association be responsible for the education of farmers and farm workers about zoonotic diseases and their prevention. The Committee does not believe there is a need to develop a separate means of assessing the incidence of zoonotic diseases among farm people, as compared with the remainder of the population, especially since the overall data collection system recommended in Committee Recommendation 1 is expected to generate information on zoonotic diseases, among other farm illness. See Committee Recommendation 27 on page 10.
31.	That safety cages on exposed silo ladders be mandatory on new and reconstructed silos in Ontario from a date to be specified in legislation. (p.98)	Not accepted	While the Committee recognizes that psychologically, safety cages provide a sense of security, the Committee does not accept the recommendation on the grounds that available information does not substantiate the effectiveness of safety cages in the event of a slip or fall. The Committee recommends instead that the Ministry of Agriculture and Food conduct research to investigate the effectiveness of both silo cages and fall arrest devices. See Committee Recommendation 22 on page 9.
32.	That the Agency mount a program to encourage farmers to install safety cages on existing silo ladders that are not equipped with them. (p.98)	Not accepted	As indicated above, the Committee is not prepared to support mandatory or voluntary installation of safety cages on silo ladders until more information is available on their effectiveness.

Explanation of Implementation Committee Action	The Committee accepts the intent of the recommendation, but makes no recommendation regarding implementation, because the Ministry of Transportation has already prepared the guidelines referred to in the Task Force's Recommendation.	The Committee accepts the intent of the recommendation but prefers that the Ministry of Transportation review the relevant legislation every five years instead of every ten years, and has so recommended. See Committee Recommendation 29 on page 11.	The Committee accepts the intent of this recommendation, as well as recommendation 50, both of which deal with the need for farmer and farm worker education relating to pesticides. The Committee prefers to combine the objectives of Task Force Recommendations 35 and 50 into a single recommendation, and recommends implementation through the Ministry of Environment, the Farm Safety Association and the Crop Protection Institute of Canada. See Committee Recommendation 13 on page 8.	
Action By Implementation Committee	Accepted	Accepted	Accepted	
Task Force Recommendation	33. That the Ministry of Transportation and Communications in conjunction with the Agency prepare and issue explicit guidelines that will ensure consistent understanding and enforcement of the Highway Traffic Act and its regulations on the use of farm vehicles on public roads in Ontario. (p.102)	34. That there be a regular review of the relevance of the provisions of the Highway Traffic Act to farm vehicles every ten years and that the Agency be party to these reviews, the first of which should occur not later than 1987. (p.103)	35. That the Agency develop and mount a program that will ensure farmer and farm worker awareness of the hazards associated with pesticides and of the need for vigilance in following protective measures. (p.112)	

Review of the Recommendations of the Ontario Task Force on Health and Safety in Agriculture

Task Force Recommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
36. That the Agency take the lead in:	Not accepted	The Committee did not accept this recommendation because
 obtaining more precise information about the problems farmers experience in reading posticide labels; preparing a set of specific Recommendations for improving the health and safety content of labels on pesticides used in Ontario; working out the necessary changes in labelling practices with the responsible provincial and federal authorities. (p.115) 		of the coming implementation of the Workplace Hazardous Materials Information System (WHMIS), and the consequent review of labelling requirements under the Pest Control Products Act, to meet WHMIS standards.
37. That the pesticide container disposal method used in Ontario be puncturing, triple rinsing, incinerating and then disposal in an approved municipal land-fill site. (p.116)	Accepted	The Committee accepts the intent of the recommendation only as a short-term strategy for the disposal of pesticide containers. Therefore, the Committee has expanded the recommendation and suggested that, as a long term strategy attention be given to the development of reusable and biodegradable pesticide containers.
		The recommendation is to be implemented by the Ministry of Environment. See Committee Recommendation 14 on page 8.

diiir	Implementation Committee	Committee Action
38. That it be mandatory that farmers and farm workers observe as a minimum interval between the time of application of a pesticide and the time of next working on the crop, the greater of the re-	Accepted	The Committee accepts the intent of the recommendation respecting re-entry times, but does not accept the mandatory aspect of the recommendation because the Committee believes it cannot be enforced.
entry period specified on the product label or that set out in the Ministry of Agriculture and Food Production Recommendations for the year and pesticide in question. (p.117)		In addition, the Committee has expanded the recommendation to clarify that re-entry times apply equally to field crops, to sprayed buildings, and to buildings containing sprayed crops.
		The recommendation is to be implemented by the Ministry of Agriculture and Food, with support from the Ministry of Environment. See Committee Recommendation 15 on page 8
39. That the testing of work protective equipment for use in Canada be undertaken by the appropriate Government of Canada Agency. (p.117)	Not accepted	The Committee wishes to defer acceptance of this recommendation, pending the outcome of the review of testing standards being carried out by the U.S. National Institute for Occupational Safety and Health (NIOSH).
		The Committee recommends that in the interim, the Ministry of Labour review personal protective equipment standards from organizations and countries other than NIOSH and Britain. See Committee Recommendation 16 on page 8.

Explanation of Implementation Committee Action	The Committee does not accept the recommendation on the grounds that better education of pesticides users is believed to be more effective than legislation. The committee noted that pesticide vendors should bear some responsibility to ensure that purchasers know how to handle pesticides they are buying. It is believed that this responsibility of the vendor will be met by virtue of the proposed mandatory pesticide vendor certification program.	The Committee believes that the intent of the recommendation is best achieved through better education of pesticide users, and has so recommended. See Committee Recommendation 13 on page 8. The Committee believes that mandatory requirements for the use of protective equipment are not enforceable, and that widespread monitoring of compliance is impractical.
Action By Explan Implementation Committee	Not accepted The Committee does n grounds that better ed to be more effective to be more pesticides they are buy it is believed that this by virtue of the proposentification program.	Not accepted The Commit recommenda pesticide use Recommend The Commit widespread n
Task Force Recommendation	40. That a requirement be written into the Pesticides Act making it necessary for licensed vendors to carry, display and promote protective equipment appropriate to the pesticide they sell under schedules 1, 2, 3 and 5 of the Ontario Classification of Pesticides. (p.118)	41. That the use of protective equipment as specified on pesticide labels be made mandatory when handling such products and that famer observance of the regulation be monitored to a sufficient degree to ensure that is widely practised. (p. 118)

Task Force Recommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
42. The health professionals be trained in the effects, diagnosis and treatment of pesticide exposure as part of the work they do to qualify for their profession; (p.119)	Not accepted	The Committee recognizes that health professionals are not adequatelay trained respecting pesticide toxicity, diagnosis and treatment, but does not accept the responsibility of the governing bodies of health professionals, in defining one aspect for qualification.
		The Committee recommends instead that the governing bodies of health professionals, (doctors, nurses, paramedics) be encouraged to include appropriate training in the school curriculum. The Ministry of Labour is to implement the recommendation. See Committee Recommendation 17 on page 9.
43. That health professionals be assured of immediate telephone access through the Poison Control Centres to treatment information on all pesticides registered in Canada and the Agency serve as a clearing house for correcting access problems. (p.119)	Accepted	The Committee accepts the intent of the recommendation and has assigned responsibility for implementation to the Ministry of Labour. See Committee Recommendation 18 on page 9. The Committee does not accept the need for any organization to act as a clearing house for correcting access problems.

Review of the Recommendations of the Ontario Task Force on Health and Safety in Agriculture

Ta	Task Force Recommendation	Action By Implementation Committee	Explanation of Implementation Committee Action
44.	That the enforcement of the <u>Pesticide Act</u> be reviewed and strengthened to ensure that the farm health and safety aspects of the program are effectively handled. (p. 120)	Not Accepted	The Committee does not accept the recommendation on the grounds that at present, the Ministry of Environment, which administers the Pesticides Act and Regulations, does not have enough pesticide officers to enforce and actively monitor compliance with the legislation. Typically, pesticide officers conduct investigations in response to complaints.
			In view of the large geographical area to be covered, and the small number of people available, the Committee believes, after consultation with the Ministry of Environment, that increased education of pesticide users is the most effective approach.
45.	That the safety aspects of the distribution and application of anhydrous ammonia be studied by the Agency and, if required, appropriate controls be developed and implemented. (p.123)	Not accepted	The Committee does not accept the recommendation on the grounds that, after consultation with the Fertilizer Institute of Ontario, it is believed that adequate controls are in place, and that the intent of the recommendation is best achieved through better user training.
46.	That the Agency work with fertilizer suppliers and commodity groups to ensure that training in the properties, safe handling and emergency treatment of anhydrous ammonia exposure is available and promoted among farmers and farm workers. (p.123)	Accepted	The Committee accepts the recommendation and has assigned responsibility for implementation to OMAF, with support from the Fertilizer Institute of Ontario and the Farm Safety Association. See Committee Recommendation 19 on page 9.

That the Agency, in conjunction with others with expertise in skill assessment and health and safety protection, give priority to exploring the work proficiency of people doing farm work and the ways of correcting deficiencies, if any, revealed by the study. (p.129) 48. That at the time of hiring, conditions of employment be fully discussed between employer and employee with particular attention being given to work breaks. (p. 136)	Implementation Committee Not accepted Accepted	The Committee Action The Committee does not accept the recommendation for 3 reasons. First, the recommendation is too open-ended to be effective - (i.e.) there is no mention of what to do with the information, once gathered. Second, there are no standards respecting proficiency in farm work. Until such standards are developed, a valid assessment of proficiency would be difficult. Third, no one disputes the fact that a lack of skill in farm work can contribute to accidents on the farm. Instead of conducting a study to explore how skilled or unskilled farmers and farm workes are, the Committee believes efforts should be aimed at improving the availability of, and participation in, high-quality training in all aspects of farm work. It is for this reason that several of the Committee's Recommendations advocate training. The Committee accepts the intent of the recommendation, and recommends implementation through educational materials, to be developed by the Farm Safety Association, with assistance from the Ministry of Agriculture and Food with assistance from the Ministry of Agriculture and Food
		and the tederal Agricultural Employment Services. See Committee Recommendation 30 on page 11.

Review of the Recommendations of the Ontario Task Force on Health and Safety in Agriculture

Task Force Recommendation	lation	Action By Implementation Committee	Explanation of Implementation Committee Action
49. That it be mandatory that Ontari, that adequate wash-up and toilet available with reasonable conveni workers on their properties and the local Medical Officer of I that this recommendation is obser	That it be mandatory that Ontario farmers ensure that adequate wash-up and toilet facilities are available with reasonable convenience to all workers on their properties and that the Agency and the local Medical Officer of Health ensure that this recommendation is observed. (p. 137)	Not accepted	The Committee does not accept the recommendation for legislation to require wash-up and toilet facilities. The Committee prefers that appropriate guidelines be developed for farmers, and believes that where problems occur, these can be addressed on a case-by-case basis, by the Medical Officer of Health, acting under the Health Protection and Promotion Act. The guidelines are to be developed by the Ministry of Health, with assistance from the Farm Safety Association. See Committee Recommendation 31 on page 11.
50. That the appropriate and awareness progrand farm workers arimportance of caref sanitation practices and contact. (p.138)	That the appropriate agencies mount education and awareness programs to ensure that farmers and farm workers are informed about the importance of careful observance of good sanitation practices in all aspects of pesticide use and contact. (p.138)	Accepted	See Explanation under Task Force Recommendation 35 on page 45.
51. That where practical, a mee to involve the farm worker the farm workplace. (p.140)	That where practical, a mechanism be developed to involve the farm worker in health and safety in the farm workplace. (p.140)	Accepted	The Committee accepts the intent of this recommendation, and of Recommendation 52, both of which are aimed at ensuring that workers have input respecting health and safety matters.
			The Committee recommends that guidelines be developed for farmers on the importance of worker representation, and that the Farm Safety Association include worker representation on the Board of Directors. See Committee Recommendations 32 and 33 on page 11.

Explanation of Implementation committee Action	See Explanation under Task Force Recommendation 51 on page 52.	
Action By Implementation Committee	Accepted	
Task Force Recommendation	52. That the Agency devise suitable worker representation arrangements pertaining to occupational health and safety on farms, ensure that employers inform workers about them and monitor the adoption of them on individual farms. (p.141)	

Appendix II

Description of the Farm Safety Association Inc.

The Farm Safety Association was founded in January 1973, for the purpose of reducing accidents and injuries on Ontario farms. The Association is governed by a Board of Directors comprised of nineteen farmers. Eight of the nineteen Directors are elected, each representing a different geographical area of Ontario. The remaining eleven Directors are appointed by various commodity groups, such as the Ontario Cattlemen's Association, or the Canadian Mushroom Growers' Association.

The Farm Safety Association receives its funding from assessments paid to the Workers' Compensation Board by farm employers. Only about one third of all farming operations in Ontario carry compensation coverage and therefore pay assessments to the Board. Farm employers pay approximately \$30,000,000 to the Board every year. The Board provides the Farm Safety Association with three per cent of this amount, namely, approximately \$1,000,000 per year to operate its programs.

The programs that the Farm Safety Association offers include:

- the provision of information on agricultural health and safety hazards;
- a wide range of safety training and awareness programs;
- audits of safety and health conditions on individual farms; and
- consultation on health and safety problems.

To carry on its activities the Farm Safety Association has a small staff of 8 at its head office in Guelph, Ontario, and six field consultants serving different areas of the province.

The programs of the Farm Safety Association are also supported by a large network of volunteers who actively promote and conduct farm safety and health programs through local farm safety associations.

Figure I shows the structure of the Farm Safety Association.

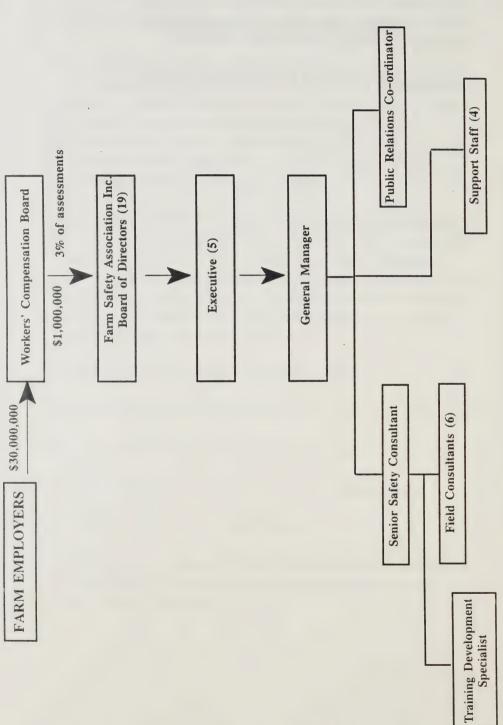


Figure I: Structure of the Farm Safety Association











